Flex-Bore™II Micro Diameter Videoborescope

Model No. 13295

Users Manual

FLEXBAR MACHINE CORPORATION
250 Gibbs Road • Islandia, NY 11749
800-879-7575 • Email: sales@flexbar.com
www.flexbar.com

GENERAL SAFETY INFORMATION

WARNING! Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS!

- Prevent object and liquid entry. Never spill liquid of any kind on the video display unit. Liquid increases the risk of electrical shock and damage to the product.
- The unit is not shock-resistant. Do not use unit as a hammer and avoid high impact resultant from things such as dropping the unit from height.
- Do not immerse camera handle or monitor in water. Avoid moisture, and store product in a dry place. Such measures reduce the risk of electric shock and damage. The lens and the tube are water resistant when the unit is fully assembled, but the monitor and handle are not.
- Do not use the camera if condensation forms inside the lens. Let the water evaporate before using again.
- Turn off the system if it is not in use.
- This product can only be completely disconnected for from its power source by unplugging the power adapter.
- Do not cut the DC power cable of provided with this product to fit with another power source.
- Attention should be given to the environmental aspects of battery disposal.
- Remove the batteries when cleaning the unit.
- Remove the batteries before storing the unit for a long time.
- When necessary, REPLACE ALL FOUR (4) BATTERIES in this unit with new ones, not one (1) or (2) batteries at a time.
- Use only the size and type of battery specified.
- Be sure to install the battery with the correct polarity as indicated in the battery compartment.
- Properly dispose of batteries. Exposure to high temperatures can cause batteries to explode so do not dispose of in a fire. Place tape over the terminals to prevent direct contact with other objects.
- Some countries have regulations concerning battery disposal. Please follow all applicable regulations.

FEATURES

- Allows for easy surveying of small, hard-to-reach places
- Mini 4.5mm waterproof LED lens, 1.0 meter flexible tube
- Manufactured and tested to IP67 waterproof standard
- 3.5” TFT-LCD detachable/mountable monitor, built-in rechargeable Li-battery
- Video recording capability, supports up to 32GB micro SD card
- Adjustable brightness on lens-mounted LED light
- Lightweight, handheld design, flexible and convenient to use
- Multi-language support

PACKING LIST

1- Handle

1- LCD Monitor

1- Flexible Tube

1- USB Cable

1- Power Adapter

1- Video Cable

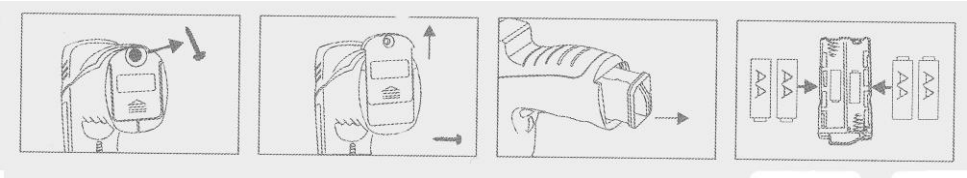
1- Software CD

Optional: Micro SD Card and Magnetic Bracket

INSTALLATION

To Install Batteries (Dry your hands before installation or replacing batteries.)

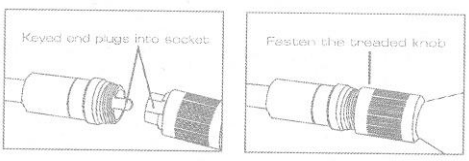
1. Using a Philips head screwdriver, remove screw and cover as illustrated below:



2. Remove battery compartment and insert four (4) AA batteries into their appropriate slots, with proper orientation, as indicated on the battery compartment.
3. Reinstall battery compartment and replace battery cover and screw.

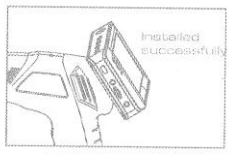
To Attach Flexible Tube with Handle

To connect the flexible tube camera with control handle, first make sure that the keyed end of the tube is aligned with the slot in the handle, then use slight force to push them together. Once properly aligned, twist the treaded knob clockwise until the connection is securely in place.



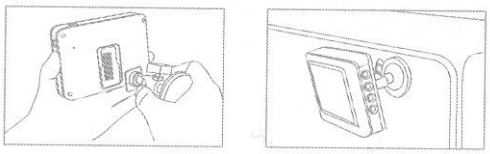
To Install Monitor for Wired Use

Flex-Bore II supports wired use by connecting the monitor to the camera handle.



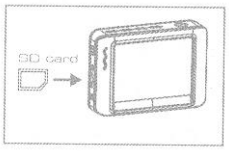
To Install Monitor Mounting Bracket

Attach the magnetic mounting bracket to the monitor using the same method used to attach the monitor to the camera handle.



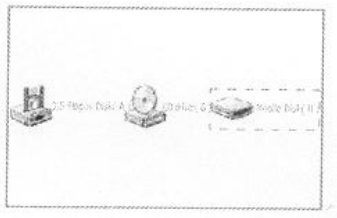
To Insert SD Card

After SD card is inserted into SD card slot successfully, an SD card icon will appear on the monitor screen; otherwise the 'no SD card' icon will show.



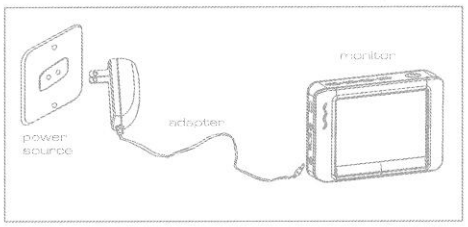
To Connect USB Cable

Use the provided USB cable to connect the monitor to any PC with a USB slot. Your computer should automatically recognize the new hardware, which you may browse by double-clicking on the My Computer icon on your desktop, and then navigating into the Mobile Disk directory.
NOTE: if your computer is unable to playback desired video files, please first install the video player software from the included CD



To Connect Monitor Power

Connect the monitor to an appropriate (100-240V ~ 50/60Hz) power source with the provided adapter. The power indicator LED will illuminate red and the battery capacity icon on the LCD will flicker, indicating that the battery is charging. When the red indicator light disappears, the battery has been fully charged.



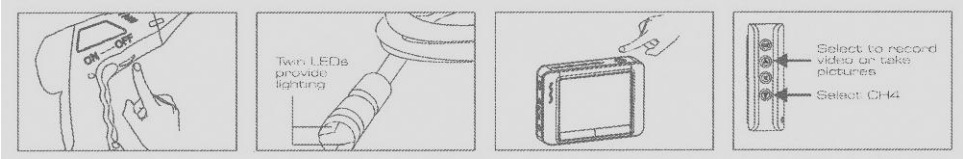
Video Output

Insert video cable into the video out socket of the monitor, insert the other end of the cable into the video in jack of any compatible TV or display device. The LCD monitor is now capable of outputting high quality video to another display.

OPERATION

Basic Operation

1. As you roll the power switch to turn on the camera, the power indicator on the camera handle will light. The rolling switch then acts as a dimmer for the twin LEDs that surround the camera on the end of the flexible tube.
2. Press and hold the power switch for 2 seconds on the monitor until the power indicator illuminates green. Then press the ▽ button to select CH4 (channel 4), or until the picture from the lens is displayed on the monitor. To toggle between video recording and picture taking functions, press the △ button on the side of the monitor.



3. When in use, the tube should easily maneuver itself into position. Do not apply excessive force.

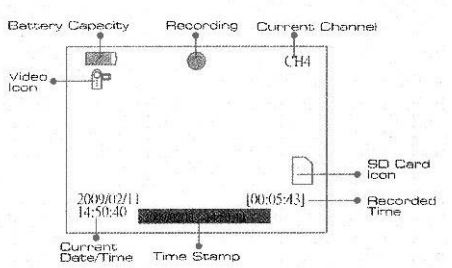
Recording Video

1. In real-time monitoring mode, press the △ button to toggle to video recording mode.
2. Press the "OK" button to begin recording.
3. Press again to stop recording.

NOTICE:

*The Video will be automatically saved as an individual file every 30 minutes

*The F icon indicates that the SD card memory is full.



Taking Photos

1. In real-time monitoring mode, press the △ button to toggle to photo capturing mode.

2. Press the "OK" button to take a photo.

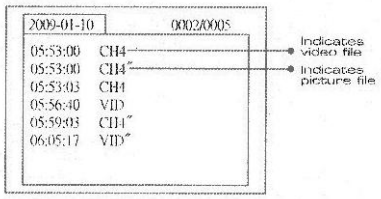
Notice:

The F icon indicates that the SD card memory is full.

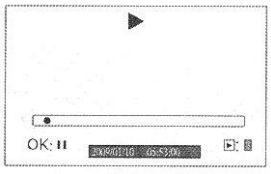
Playback Video/Picture

1. In real-time monitoring mode, press the ☰ button to toggle to the video/picture folder.
2. Press the △ and ▽ buttons to select your desired folder, and then press "OK" to toggle to the right interface:

Notice: A double quotation marks (") next to a file name indicates that the file is a video. No double quotation marks next to a file indicate that the file is a picture.



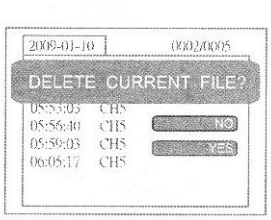
3. for playback video:Press the △ or ▽ button to select your desired video, and then press 'OK' to playback.
   Pause: press the 'OK' button once to pause, press again to resume play:
   Fast Forward: press the △ Button
   Rewind: Press the ▽ Button
   Stop/Exit: press the ☰ Button



   For viewing Pictures:
   Press the △ or ▽ button to select your desired video, press 'OK' button to view and press again to exit.

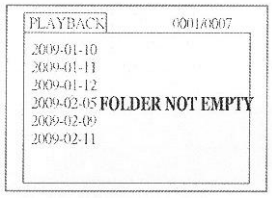
Deleting Video/Picture

1. In real-time monitoring mode, press the ≡ button to toggle to the video/picture folder.
2. Press the △ or ▽ button to select your desired folder, and then press 'OK' button.
3. Press the △ or ▽ button to select your desired file and then press and hold the ≡ button for 2 seconds or until the right interface appears.
4. Press the △ or ▽ button to toggle between YES and NO, that is, to delete or cancel. Once you have highlighted your desired selection, press the 'OK' button.



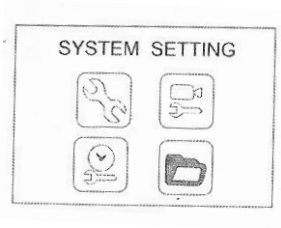
Deleting Folder

Deleting a folder is done in the same way as deleting a single file, however, make sure that the folder is empty first, otherwise the following error message will appear:



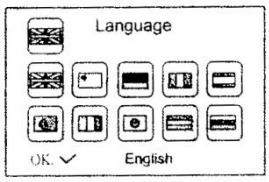
How to enter the Setting Mode

In real-time monitoring mode press and hold the ≡ button for 1-2 seconds, or until the right interface appears:



Language Setting

1. In the setting mode, press the △ or ▽ button to select 'SYSTEM SETTING', and then press 'OK' button.
2. Press the △ or ▽ button to select 'Language', and then press 'OK' button, the following interface will appear.
3. Press the △ or ▽ button to select your desired language.
4. Press 'OK' button to confirm and exit.



Video System Setting

1. In the setting mode, press the △ or ▽ button to select 'SYSTEM SETTING' and then press 'OK' button.
2. Press the △ or ▽ button to select 'Video System' and then press 'OK' button.
3. Press the △ or ▽ button to toggle between NTSC and PAL. Once your desired system is selected, press 'OK' button to confirm and exit.

Formatting

1. In the setting mode, press the △ or▽ button to select 'SYSTEM SETTING' and then press 'OK' button.
2. Press the△ or▽ button to select 'Format' and then press 'OK' button.
3. Press the△ or▽ button to toggle between YES and NO, that is, to format or cancel. Once you have highlighted your desired selection, press the 'OK' button.

Default Setup

1. In the setting mode, press the △ or▽ button to select 'SYSTEM SETTING' and then press 'OK' button.
2. Press the △or▽ button to select 'Default Setup' and then press 'OK' button.
3. Press the△ or▽button to toggle between YES and NO that is to restore default or cancel. Once you have highlighted your desired selection, press the 'OK' button.

View Version Information

1. In the setting mode, press the △ or▽ button to select 'SYSTEM SETTING' and then press 'OK' button.
2. Press the △or▽ button to select 'Version' and then press 'OK' button. You will now be able to view the version details of your product.

Frame Rate Setting

1. In the setting mode, press the △ or▽ button to select 'RECORDER SETTING' and then press 'OK' button.
2. Press the△ or▽ button to select 'Frame Rate' and then press 'OK' button.
3. Press the △or▽ button to toggle between different frame rates. Once your desired rate is selected, press 'OK' button to confirm and exit.

Time Stamp Setting

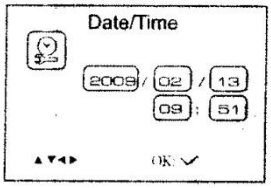
1. In the setting mode, press the △ or▽ button to select 'RECORDER SETTING' and then press 'OK' button.
2. Press the△ or▽button to select 'Time Setup' and then press 'OK' button.
3. Press the△ or▽ button to toggle between 'still' and 'video'. Once your desired selection is made, press 'OK' button to confirm and exit.

Recording Type

1. In the setting mode, press the △or▽ button to select 'RECORDER SETTING' and then press 'OK' button.
2. Press the△ or▽button to select 'Recording Type' and then press 'OK' button.
3. Press the△ or▽button to toggle between 'still' and 'video'. Once your desired selection is made, press 'OK' button to confirm and exit.

Date/Time Setting

1. In the setting mode, press the △ or▽ button to select 'Date/Time' and then press 'OK'. The right interface will appear:
2. Press 'OK' button to select Date or Time
   Press the △ or▽ button to adjust selection
   Press the ☰ button to confirm and exit.



Event Playback

1. In the setting mode, press the △ or▽ button to select 'EVENT PLAYBACK' and then press 'OK' button.
2. Refer to user manual instructions on Playback of Video/Picture, Deleting Video/Picture, and Deleting Folder for guidance.

SPECIFICATIONS

Model No.	**13295**
Imaging Sensor	**CMOS**
Total Pixels	**320 x 240**
Horizontal Viewing Angle	**63**
Transmission Frequency	**2468MHz**
Minimum Illumination	**0 Lux**
Modulation Type	**FM**
Bandwidth	**18MHZ**
Power Supply	**4 x AA batteries**
Unobstructed Effective Range	**10m**
Waterproof Capacity	**IP67 (for lens tube only)**
Tube Diameter	**4.5mm**
Dimensions (W x D x H)	**186 x 145 x 41 (mm) (Excluding Flexible Tube)**
Approx. Weight	**450g**
LCD Screen Type	**3.5" TFT-LCD**
Effective Pixels	**960 x 240**
Video System	**PAL/ NTSC**
Transmission Frequency	**2414MHz, 2432MHz, 2450MHz, 2468MHz**
Exterior Supply Voltage	**5VDC**
Consumption Current (Max.)	**500mA**
Charging Time	**3 hours**
Working Time	**2 hours**
Picture/Video Pixels	**640 x 480**
Video Size	**27M byte/minute**
Frame Rate	**30 frame/second**
Video Output Level	**0.9-1.3VP-P@75ohm**
Dimensions (W x D x H)	**100 x 70 x 25 (mm)**
Approx. Weight	**140g**
Operating Temperature	**-10°C-50°C/14°F-122°F**

*Actual transmission range of wireless monitoring may vary according to the weather, location, interference or building construction.

*All specifications are subject to minor change without prior notice.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	LIKELY SOLUTIONS
Tool will not start	1. Monitor not charged. 2. Batteries need charging	1. Charge monitor 2. Replace batteries in control handle
Monitor will not charge	1. Adapter cable not attached properly 2. Adapter not connected to power	1. Make sure adapter cable is connected between monitor and adapter. 2. Make sure adapter is securely plugged into wall socket.
Image too dark or light	1. LEDs near camera need adjustment 2. Monitor display needs adjustment	1. Use dial on control handle to adjust brightness of LEDs 2. Use contrast and brightness buttons on monitor to adjust image.
Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.		